CONTENTS

PART I

Preface	vi
Organizing and Advisory Committees	i
MATERIALS CHEMISTRY	
R. Roy*, Synthesizing new materials to specification	3
R. Schöllhorn*, From electronic/ionic conductors to superconductors	23
G. Alberti, M. Casciola, U. Costantino and F. Di Gregorio, Protonic conduction of polyhydrated phases obtained from colloidal dispersions of α-zirconium phosphate	4(
R.H. Jarman, Ion exchange reactions of potassium titanyl phosphate	45
P.K. Dorhout, G.L. Rosenthal and A.B. Ellis, Two families of lamellar, luminescent solid solutions: the intercalative conversion of hydrogen uranyl phosphate arsenates to uranyl phosphate arsenates	50
D. Beltrán-Porter, P. Amorós, R. Ibáñez, E. Martínez, A. Beltrán-Porter, A. le Bail, G. Ferey and G. Villeneuve, Synthetic pathways to vanadyl phosphates	57
J. Alamo and J.L. Rodrigo, Thermal expansion of LiZr ₂ (PO ₄) ₃ : water inclusion influence	70
P.G. Dickens, S.D. Lawrence, D.J. Penny and A.V. Powell, Insertion compounds of uranium oxides	77
F. Harb, B. Gérand, G. Nowogrocki and M. Figlarz, Structural filiation between a new hydrate MoO ₃ · ¹ / ₃ H ₂ O and a new monoclinic form of MoO ₃ obtained by dehydration	84
M.S.W. Vong, S. Stevenson and P.A. Sermon, Copper tungsten bronzes: novel preparative routes and reactivity	91
M. Ohashi, H. Nakano, S. Yamanaka and M. Hattori, Hydrogen uptake by layer structured β-ZrNCl	97
C. Delmas, Y. Borthomieu, C. Faure, A. Delahaye and M. Figlarz, Nickel hydroxide and derived phases obtained by chimie douce from NaNiO ₂	104
C. Cristiani, P. Forzatti, L. Lietti, I. Pasquon, P.L. Villa and M. Bellotto, Preparation chemistry and phase transformations in the Zn-Mn-Cr-O system	112
J. Amador, E. Gutiérrez Puebla, M.A. Monge, I. Rasines, J.A. Campa, J.M. Gomez de Salazar and C. Ruiz Valero, Crystal structure of BaGd ₂ NiO ₅ prepared by reaction of Ni metal with BaCO ₃ and Gd ₂ O ₃	123
G. Svensson, X-ray diffraction and electron microscopy studies of new reduced phases in the Ba-Nb-O system	126

^{*} Plenary lecture.

G. Huan, M. Greaney, M. Greenblatt, G. Liang and M. Croft, New rhenium chalcogenides with $[Re_6X_8]$ -cluster units	13
J.R. Günter and M. Amberg, "High-temperature" magnesium tungstate, MgWO ₄ , prepared at moderate temperature	14
M.L. Phillips, T.E. Gier, M.M. Eddy, N.L. Keder, G.D. Stucky and J.D. Bierlein, Inclusion tuning of nonlinear optical materials: KTP isomorphs	14
R.C.T. Slade, B.C. West and G.P. Hall, Chemical and electrochemical mixed alkali metal insertion chemistry of the hexagonal tungsten trioxide framework	154
J.M. Gonzalez-Calbet, C. Rosique-Perez, M. Vallet-Regi, M.A. Alario-Franco and J. Rodriguez-Carvajal, Lithium insertion in reduced tungsten oxides	162
G.W. O'Bannon, M.J. McKelvy, W.S. Glaunsinger and R.F. Marzke, Structure and dynamics of ammonia in Li-ammonia intercalated TiS ₂ : a proton NMR study	167
M.J. McKelvy, J.M. Dunn, V.G. Young, Jr. and W.S. Glaunsinger, Interpretation of the equilibrium composition of ammoniated transition metal disulfides	174
G.A. Wiegers, A. Meetsma, R.J. Haange and J.L. de Boer, Crystal growth, structure and some properties of PbNbS ₃ , SnSNbS ₃ , LaNbS ₃ and related misfit layer compounds	183
HR. Oswald, G. Stauber-Reichmuth and A. Reller, Transition-metal molybdenum or tungsten sulfides from amine precursors	192
F. Fievet, J.P. Lagier, B. Blin, B. Beaudoin and M. Figlarz, Homogeneous and heterogeneous nucleations in the polyol process for the preparation of micron and submicron size metal particles	198
L.S. Puckhaber, H. Cheung, D.L. Cocke and A. Clearfield, Reactivity of copper manganese oxides	206
E. Wolska and U. Schwertmann, The vacancy ordering and distribution of aluminium ions in γ -(Fe, Al) ₂ O ₃	214
S. Crouch-Baker and P.G. Dickens, Qualitative bonding models for some molybdenum oxide phases	219
C. Mazzocchia, F. Di Renzo, Ch. Aboumrad and G. Thomas, Stability of β-nickel molybdate	228
N. Floquet and O. Bertrand, Reactivity of the Mo ₁₈ O ₅₂ (100) surface: a study of RHEED of the Mo ₁₈ O ₅₂ -MoO ₃ structural transformation	234
Q. Huang, JZ. Xu and W. Li, Preparation of tetragonal defect scheelite-type RE(MoO ₄) ₃ (RE=La to Ho) by precipitation method	244
G. Weber, D. Viale, H. Souha, B. Gillot and P. Barret, Kinetic data and mechanistic model for the reaction between Si and CuCl	250
B. Fubini, V. Bolis, M. Bailes and F.S. Stone, The reactivity of oxides with water vapor	258
M. Taniguchi, M. Wakihara and S.K. Basu, Oxidation of copper Chevrel phase Cu ₂ Mo ₆ S _{8-y}	273
A. Torkler, H. Niemann, W. Gunsser and W. Niemann, Gd/Cr-perovskite: a study of the sintering process	278

Contents	XII
ontents	XII

MINERALS AND REACTIVITY

S. Kume*, O. Ohtaka, T. Yamanaka and A. Navrotsky, High pressure polymorphs in ceramics and minerals GeO ₂ and ZrO ₂	285
A. Navrotsky, Silicates and germanates at high pressure	288
H. Eckert, J.P. Yesinowski and E.M. Stolper, Quantitative NMR studies of water in silicate glasses	298
R. Hellmann, D.A. Crerar and R. Zhang, Albite feldspar hydrolysis to 300°C	314
F. Adam, B. Dupre and C. Gleitzer, Cracking of hematite crystals during their low-temperature reduction into magnetite	330
B. Fubini, E. Giamello, L. Pugliese and M. Volante, Mechanically induced defects in quartz and their impact on pathogenicity	334
M.S. Whittingham, Transport properties of the mineral vermiculite	344
J.F. Brody, J.W. Johnson, G.B. McVicker and J.J. Ziemiak, Olefin isomerization over an alumina-pillared fluoromica catalyst	350
P. Malla, S. Yamanaka and S. Komarneni, Unusual water vapor adsorption behavior of montmorillonite pillared with ceramic oxides	354
H. Kodama and S.S. Singh, Polynuclear hydroxyaluminum-montmorillonite complexes: formation of 18.8 Å and 28 Å pillared structures	363
R.M. Lewis and H. Kuroda, Delaminated layered materials	373
J.J. Fitzgerald, A.I. Hamza, C.E. Bronnimann, S.F. Dec, Solid-state ²⁷ Al and ²⁹ Si NMR studies of the reactivity of the aluminum-containing clay mineral kaolinite	378
N. Chaikum and R.M. Carr, An ESR study of kaolinite under extreme conditions	389
T. Nishino, Characterization of δ-BaCO ₃	394
A. Marini, V. Berbenni, V. Massarotti, G. Flor, R. Riccardi and M. Leonini, Solid-state reaction study on the system Ni-Li ₂ CO ₃	398
J.M. Longo and K.C. Voight, Synthesis of mixed-metal carbonates by grinding	409
G. Spinolo and U. Anselmi-Tamburini, Mechanism of low temperature calcite decomposition	413
SYNTHESIS AND REACTIVITY	
E.W. Corcoran Jr. and D.E.W. Vaughan, Hydrothermal synthesis of mixed octahedral- tetrahedral oxides: synthesis and characterization of sodium stannosilicates	423
M.T. Weller and G. Wong, Characterisation of novel sodalites by neutron diffraction and solid- state NMR	430
P. Krijgsman, J.G.M. Becht and J. Schoonman, Hydrothermal processing of ceramic powders for alumina-magnesia spinels	436
W. Göpel, K. Schierbaum, HD. Wiemhöfer and J. Maier, Defect chemistry of tin(IV)-oxide in	440

K.S. Suslick, D.J. Casadonte and S.J. Doktycz, The effects of ultrasound on nickel and copper powders	444
M. Senna and K. Okamoto, Rapid synthesis of Ti- and Zr-nitrides under tribochemical condition	453
J.M. Criado, C. Real and J. Soria, Study of mechanochemical phase transformation of TiO ₂ by EPR. Effect of phosphate	461
W. Weppner, Reactivity of multinary solids	466
S.D. Dunmead, Z.A. Munir and J. Birch Holt, Gas-solid reactions under a self-propagating combustion mode	474
S. Fujitsu, K. Koumoto and H. Yanagida, Formation of energy barrier by adsorbed oxygen on ZnO	482
I. Bueno, C. Parada and R. Saez Puche, Crystal growth, reactivity and properties of KLn(CrO ₄) ₂ (Ln=La, Pr, Nd, Sm and Eu)	488
G.F. de la Fuente, L.R. Black, D.M. Andrauskas and H.R. Verdún, Growth of Nd-doped rare earth silicates by the laser floating zone method	494
T.A. Guiton and C.G. Pantano, Synthesis of ZnS whiskers	506
S.D. Cox, T.E. Gier, G.D. Stucky and J. Bierlein, Inclusion tuning of nonlinear optical materials: SHG of organic guests in molecular sieve hosts	514
P.D. Thompson and D.A. Keszler, The pyroborate Sr ₂ ScLiB ₄ O ₁₀ , a new structural type	521
HR. Oswald, P. Kuhn and A. Reller, Bimetallic phases from reduction of delafossite-type oxides in hydrogen	528
J.L. Shi, J.H. Gao and Z.X. Lin, Formation of monosized spherical aluminum hydroxide particles by urea method	537
J.L. Shi and Z.X. Lin, Preparation of ZrO ₂ powder by oxalate precipitation	544
POLYMERS AND THE ORGANIC SOLID STATE	
R.M. Penner, L.S. van Dyke and C.R. Martin*, Electrochemical evaluation of charge-transport rates in electronically conductive polymers	553
Z.S. Soos*, G.W. Hayden and S. Ramasesha, π -electronic structure of conjugated polymers	567
SM. Huang and R.B. Kaner, Divalent dopant ions for conducting polymers	575
N. Theophilou, Influence of the catalyst system on the structure and conductivity of a new $(CH)_x$	582
M.G. Kanatzidis, H.O. Marcy, W.J. McCarthy, C.R. Kannewurf and T.J. Marks, In situ intercalative polymerization chemistry of FeOCl. Generation and properties of novel, highly conductive inorganic/organic polymer microlaminates	594
C.R. Theocharis, A.M. Clark, M.J. Godden and A.C. Perryman, Solid state reactions of metal complexes of substituted cyclopentanones: an infrared spectroscopic study	609

Contents	XV
Unienis	A 1

T. Zerlia, A. Marini, V. Berbenni, V. Massarotti, F. Giordano, A. La Manna, G.P. Bettinetti and C. Margheritis, Solid state interaction study on the system polyvinylpyrrolidone-XL/trimethoprim
H.K. Cammenga, S.M. Sarge and S. Eligehausen, A detailed study of the mechanism of an organic solid state reaction

PART II

OXIDES AND CERAMICS I

L. Livage, C. Sanchez, M. Henry and S. Doeum, The chemistry of the sol-get process	03.
L.C. Klein*, Sol-gel processing of ionic conductors	639
J.C. Pouxviel, S. Parvaneh, E.T. Knobbe and B. Dunn, Interactions between organic dyes and sol-gel matrices	640
M.G.L. Mirabelli, A.T. Lynch and L.G. Sneddon, Molecular and polymeric precursors to boron-based ceramics	655
K.E. Gonsalves and K.T. Kembaiyan, Synthesis of advanced ceramics and intermetallics from organometallic/polymeric precursors	661
C.H. Pai, K. Koumoto, S. Takeda and H. Yanagida, Preparation of SiC hollow particles by gas- phase reaction and thermoelectric properties of sintered bodies	669
H.S. Horowitz, A.J. Jacobson, J.M. Newsam, T.T. Lewandowski and M.E. Leonowicz, Solution synthesis and characterization of sillenite phases, Bi ₂₄ M ₂ O ₄₀ (M=Si, Ge, V, As, P)	678
C.J.J. Tool and E.H.P. Cordfunke, Influence of precipitation on the microstructure and sinterability of yttria	691
M. Valigi, A. Cimino, D. Gazzoli and G. Minelli, The influence of additives (Cl ⁻ , ReO $_4^-$, Ti(IV)) on some properties of ZrO $_2$	698
J. Soria, J.C. Conesa, J.S. Moya, R. Moreno and J. Requena, Effect of iron impurities in yttrium-partially stabilized zirconia	706
J. Nowotny, M. Sloma and W. Weppner, Surface reactivity of yttria-doped zirconia with oxygen	709
M. Kosugi, N.C. Tso and J.M. Sanchez, First-principles calculation of the Ni-Cr phase diagram	714
J.M. González-Calbet, M.J. Sayagués and M. Vallet-Regí, An electron diffraction study of new phases in the $LaNiO_{3-x}$ system	721
J. Maier, Kröger-Vink diagrams for boundary regions	727
P. Tailhades, C. Sarda, A.C. Vajpei, A. Rousset and B. Gillot, Structural analysis of submicron Ti- and Mn-ferrite spinels via their reactivity studies	734

A.C. Vajpei, A. Rousset, Uma, K. Chandra, I.P. Saraswat and V.K. Mathur, The characterization and thermal transformations of coprecipitated iron(III)-chromium(III)-hydroxide systems	741
W. Carrillo-Cabrera and D.J. Smith, HRTEM study of the surface and bulk of nickel oxide: influence of annealing and quenching	749
OXIDES AND CERAMICS II	
H.R. Allcock*, Reactions of inorganic high polymers as a route to tailored solids	761
SI. Hirano* and K. Kato, Processing of crystalline LiNbO ₃ films with preferred orientation through an organometallic route	765
A.J. Burggraaf, K. Keizer and B.A. van Hassel, Ceramic nanostructure materials, membranes and composite layers	771
A.S. Nagelberg, Growth kinetics of Al ₂ O ₃ /metal composites from a complex aluminium alloy	783
J.G.M. Becht, P.J. van der Put and J. Schoonman, CVD of laminar composites in the system TiN-TiB ₂	789
L.E. McCandlish and R.S. Polizzotti, Control of composition and microstructure in the Co-W-C system using chemical synthetic techniques	795
J.M. Honig and P. Gopalan, Use of a mean-field model in the calculation of electrical transport effects in $Fe_{3(1-\delta)}O_4$	802
M. Martin, Tracer diffusion in oxides in an oxygen potential gradient	807
P. Franke and R. Dieckmann, Defect structure and transport properties of mixed iron- manganese oxides	817
F.J.J. van Loo, W. Wakelkamp, G.F. Bastin and R. Metselaar, Diffusion of carbon in TiC_{1-y} and ZrC_{1-y}	824
S. Reyes, E. Iglesia and K.F. Jensen, Application of percolation theory concepts to the analysis of gas-solid reactions	833
M. Desmaison-Brut, J.G. Desmaison and P. Verdier, The reactivity in oxygen of two M-Si-Al-O-N oxynitride glasses (M=Ca, Mn)	843
JL. Hébrard, M. Pijolat and M. Soustelle, Kinetic data and mechanistic model for initial sintering of TiO ₂ anatase powder	852
FILMS, GLASSES AND CATALYTIC MATERIALS	
T.D. Moustakas*, The role of the tungsten filament in the growth of polycrystalline diamond films by filament-assisted CVD of hydrocarbons	861
J.M. Thomas*, Controlling the catalytic performance of solids	869
P. Vashishta, R.K. Kalia and I. Ebbsjö, Structural correlations and vibrational spectra of molten and glassy GeSe ₂	872
Y.M.M. Hornos, G.A. Antonio, J.P. Rino, I. Ebbsjö, R.K. Kalia and P. Vashishta, Molten Ag ₂ Se: a molecular dynamics study	882

Contents	XVII
J. Haber, T. Machej and R. Grabowski, Solid/solid wetting in MoO ₃ /TiO ₂ system	887
F. Morin and LC. Dufour, High-temperature surface reactivity of TiO ₂ in CO/CO ₂ mixtures: a kinetic study	893
I.E. Wachs, JM. Jehng and F.D. Hardcastle, The interaction of V ₂ O ₅ and Nb ₂ O ₅ with oxide surfaces	904
A. Steinbrunn and M. Bordignon, Reactivity of molybdenum oxide thin films epitaxied on cobalt oxide: a surface study	911
B.A. Boukamp, I.C. Vinke, K.J. de Vries and A.J. Burggraaf, Surface oxygen exchange properties of bismuth oxide-based solid electrolytes and electrode materials	918
H. Chen and S.M. Heald, Glancing angle EXAFS studies of interfacial reactions: an application to Cu-Al thin films	924
D.L. Cocke, W.E. Daulat, M.S. Owens and R.B. Wright, The surface reactivity of zirconium-nickel and hafnium-nickel intermetallic compounds	930
G.A. Arbuckle, Y. Chen, C. Hidalgo-Luangdilok and A.B. Bocarsly, Electrochemical reactivity of ultra-thin cyanometallate films on electrode surfaces	941
Y. Ikuma and W. Komatsu, Interpretation of the difference in surface diffusion coefficients determined by dynamic and static methods	946
G.A. Antonio, R.K. Kalia and P. Vashishta, A molecular dynamics study of SiSe ₂ glass	950
H. Iyetomi, P. Vashishta and R.K. Kalia, The intermediate-range order in molten and glassy $GeSe_2$	954
H. Iyetomi and P. Vashishta, Density-functional theory of three-body interactions in liquids and glasses	959
SH. Chien, LY. Shao, M. Che and L. Bonneviot, Stabilization and reactivity of Ni ⁺ ions on TiO ₂ and TiO ₂ /SiO ₂ systems	962
J.P. Rino, Y.M.M. Hornos, G.A. Antonio, I. Ebbsjö, R.K. Kalia and P. Vashishta, A molecular dynamics study of superdionic Ag ₂ Se	968
C.J.G. van der Grift, M. de Boer and J.W. Geus, The reactivity of a copper-based flue gas desulfurization absorbent	974
A. Tressaud, G. Demortain, J. Portier, B. Tanguy, C. Parent, P. Hagenmuller and H. Dexpert, Hyperquenched amorphous fluorides: optical and EXAFS studies	985
L.Y. Chiang, J.D. Passaretti, J.W. Swirczewski and R.R. Chianelli, Novel dehydrogenative condensation reactivity of rhenium sulfide with organic heterocyclic molecules	988
P. Murugaraj and J. Maier, Heterogeneous catalysis with composite electrolytes	993
K. Lázár, L. Guczi and B.M. Choudary, State of Fe ²⁺ ions inside X zeolite lattice during CO+H ₂ reaction	1000
J. Deng and X. Zhang, Amorphous alloy deposited on support and its hydrogenation activity	1006
T.I. Korányi, I. Manninger and Z. Paál, Sulfidation of Co-Mo catalysts by thiophene: structure and activity	1012

P. Porta, R. Dragone, M.L. Jacono, G. Minelli and G. Moretti, The reduction process of copper-zinc oxide-(alumina) methanol catalysts	1019
M. Gougeon, B. Maachi, A.C. Vajpei, A. Rousset and B. Gillot, Investigations on potassium ions influence on the morphology and reactivity of some potassium ferrites and potassium aluminium ferrites having spinel and β-alumina structures prepared from oxalate precursors	1025
HIGH TEMPERATURE OXIDE SUPERCONDUCTORS	
B. Raveau*, C. Michel and M. Hervieu, Oxygen nonstoichiometry and superconductivity in mixed valence copper oxides	1035
T. Venkatesan, P. England, P.F. Miceli, E.W. Chase, C.C. Chang, B. Wilkens, J.M. Tarascon, X.D. Wu, A. Inam, B. Dutta, M.S. Hegde and J.B. Wachtman, As-deposited near-single crystalline high $T_{\rm c}$ and $J_{\rm c}$ and superconducting thin films by a pulsed laser deposition process	1043
M.E. Gross, P.K. Gallagher and W.L. Brown, Superconducting thin films and ion beam patterning using metal carboxylate precursors	1051
M.A. Alario-Franco and C. Chaillout, Nonstoichiometry and reactivity of Ba ₂ YCu ₃ O _{7-δ}	1056
J.M. Newsam, A.J. Jacobson, D.P. Goshorn, J.T. Lewandowski, D.B. Mitzi, A. Kapitulnik, D. Xie and W.B. Yelon, Orthorhombic and tetragonal structures in the La(Ba _{2-v} La _v)Cu ₃ O _{7-x} system	1064
E. Schönherr, On the synthesis of TmBa ₂ Cu ₃ O _n from Tm ₂ O ₃ , BaCO ₃ and CuO	1080
H.S. Horowitz, R.K. Bordia, C.C. Torardi, K.J. Morrissey, M.A. Subramanian, E.M. McCarron, J.B. Michel, T.R. Askew, R.B. Flippen, J.D. Bolt and U. Chowdhry, The effect of synthesis methods on the processing and properties of YBa ₂ Cu ₃ O _{6+x}	1087
J.A. Stuart, P.K. Davies and T.P. Feist, Fluorination of YBa ₂ Cu ₃ O _{7-x}	1100
S.M. Zahurak, D.W. Murphy, S. Nakahara, W.W. Warren Jr., D.M. Krol, A.M. Thayer, D.C. Douglass, G.F. Brennert, S.H. Glarum, E.M. Gyorgy, S.M. Fine and M. Greenblatt, Effects of fluorination on the 90 K superconductor $Ba_2RCu_3O_{7-\delta}$ (R=Y, Eu; $0 \le \delta \le 1$)	1104
A. Tressaud, B. Chevalier, B. Lepine, K. Amine, J.M. Dance, L. Lozano, J. Darriet, J. Etourneau, R. Tournier, A. Sulpice, P. Lejay, J.L. Diot and P. Maestro, Influence of low- temperature fluorination process on the characteristics of superconductors YBa ₂ Cu ₃ O _{7-δ} and Bi ₄ (Ca,Sr) ₆ Cu ₄ O _{16+δ}	1109
J.R. Grasmeder, M.T. Weller, P.C. Lanchester and C.E. Meats, Superconductivity in the Y-La-Cu-O system	1115
H-X Liu, D.L. Cocke, D.G. Naugle and R.K. Pandey, Photoelectron spectroscopic study of the high T_c superconducting material YBa ₂ Cu ₃ O ₇	1125
P.K. Gallagher, G.S. Grader and H.M. O'Bryan, Effect of an oxygen gradient on the Ba ₂ YCu ₃ O _x superconductor	1133
M. Schwartz, D. Cahen, M. Rappaport and G. Hodes, Quantitatively controlled, room temperature reduction of YBa ₂ Cu ₃ O _{7-x} by electrochemical methods	1137
H.M. O'Bryan and P.K. Gallagher, Oxygen content and structure of Ba ₂ YCu ₃ O _x below 525°C	1143

Contents XIX

1188

S.M. Fine and M. Greenblatt, Preparation and characterization of single-crystal $RBa_2Cu_3O_{7-1}$ ($R=Er,\ Ho$)	1149
E. Moran, U. Amador, M. Barahona, R. Saez-Puche, M.A. Alario-Franco, A. Fuertes and J.M. Gomez de Salazar, $Ba_2(RE)Cu_3O_{7-\delta}(RE=La, Pr, Nd, Sm, Gd)$: crystal growth, structure and magnetic properties	1154
D. Beltrán-Porter, E. Martínez-Tamayo, R. Ibañez, A. Beltrán-Porter, J.V. Folgado, E. Escrivá V. Muñoz, A. Segura and J. Martínez-Pastor, Comparative study of synthethic procedures YBACUO-type oxides	
F. Garcia-Alvarado, E. Moran, M.A. Alario-Franco, M.A. Gonzalez, J.L. Vicent, F. Lera and C. Rillo, New materials derived from the barium lead bismuth oxide (BPP) superconductors.	or 1167
W. Carrillo-Cabrera, HD. Wiemhöfer and W. Göpel, Ionic conductivity of oxygen ions in $YBa_2Cu_3O_{7-x}$	1172
G.R. Paz-Pujalt, A.K. Mehrotra, S.A. Ferranti and J.A. Agostinelli, Solid state reactions in the formation of YBa ₂ Cu ₃ O _{7-δ} high T_c superconductor powders	e 1179
P. Murugaraj, J. Maier and A. Rabenau, Y-Ba-Cu-O superconductor: preparation of highly oriented ceramics, improvement of durability and precise determination of redox state	1183
J.M. Dance, A. Tressaud, B. Chevalier, J. Darriet and J. Etourneau, ESR spectra of high $T_{\rm c}$	

superconducting oxides treated under various atmospheres

